

CLAIMS

1. A cushion pad for use with a rapid load testing system, the cushion pad
5 comprising
a block having an array of recesses in a first face, and formed of an elastomeric material;
said recesses each having a channel in fluid communication with an outside surface of the block, other than the first face, for venting air from said recess;
10 wherein the cushion pad is arranged to dampen an impact on a pile from a dynamic load.
2. The cushion pad according to claim 1, further including one or more cushion inserts, with each recess shaped to receive one cushion insert;
15 such that, on insertion the at least one cushion insert is flush with the first face.
3. The cushion pad according to claim 2, wherein the cushion insert is formed from a material having a different stiffness than the material of the block.
- 20 4. The cushion pad according to claim 2 or 3, wherein the number of cushion inserts is less than the number of recesses.
5. The cushion pad according to any one of claims 1 to 4, further including a second cushion pad, wherein said cushion pads are mountable to opposed ends

of a counter weight to form a counter weight assembly, said counter weight assembly arranged to replace a drop hammer for use with said rapid load test.

- 5 6. The cushion pad according to claim 5, wherein the drop hammer assembly includes a second pair of cushion pads mountable to the opposed ends of the counter-weight.
- 10 7. The cushion pad according to claim 5 or 6, further including a hammer bucket; said hammer bucket including at least one cavity for receiving the counter-weight assembly;
8. The cushion pad according to claim 7, wherein said hammer bucket includes an array of cavities, each cavity arranged to receive the counter weight assembly.
- 15 9. A counter-weight assembly for use with a rapid load testing system, comprising a counter-weight;

a pair of cushion pads according to claim 1 to 4, each of said cushion pads mounted to opposed ends of the counter-weight;

said counter-weight assembly forming a drop hammer for use with said rapid
20 load test.